Resource Roads and Communities

Staff Report

UBCM/Province Joint Committee

August 25, 2010

Contents

a) Executive Summary..... 3

b) Introduction..... 7

c) The Importance of Resource Roads in Society and the Economy..... 8

d) The Nature of Resource Roads..... 12

e) Issues, Principles and Recommendations..... 13
- i. The Management Framework for Resource Roads..... 13
- ii. Resource Roads as Access to Communities and High Public Use Areas 15
- iii. Road Deactivation and Public Access..... 20
- iv. Public and Stakeholder Communication and Influence in Resource Roads Management..... 24

f) Other Considerations..... 29
- i. Roads on Private Land..... 30
- ii. Resource Road Access To Private Land..... 30
- iii. Management of Human Activity Off of Resource Roads..... 32
- iv. Public Use of Road Radios on Resource Roads..... 33

g) Conclusion..... 34

Executive Summary

The resource road network in BC, estimated at 400,000 kilometres in length, is a critical part of the transportation infrastructure of our province. On an area basis, resource roads provide ground access to a far larger proportion of BC's land base than does the public highway and rural side road network. The resource road network is an outcome from many decades of expansion in the forest, energy and mining resource sectors, which privately finance the majority of costs associated with resource roads. These sectors, so critical to BC's economic base, will continue to require resource roads that efficiently support their operations.

The role of resource roads in our economy and society has evolved as our economy has diversified, our population has grown and community use of resource roads has changed. Consequently, some resource roads are now the supply line to communities and residences, the route to the nearest hospital, sometimes the school bus route for children and they are travelled by workers to their place of employment. They are the access to some of the most important back-country recreation assets in the province. For rural British Columbians, these roads support the pursuits that define our rural lifestyle and values. In many cases, they link remote First Nations communities to the rest of BC, opening up new opportunities for those communities. Not surprisingly, a number of our public highways and rural side roads transitioned to that status from resource roads, and such transitions will continue as our population grows (Statistics Canada projects minimum population growth of 29% over the next 25 years).

Some roads are infrastructure platforms for rural economic diversification and growth, supporting the full range of back country businesses that exist along their length. The tourism, sport fishing, hunting, ranching, motorized and non-motorized recreation and alternative energy industries rely on resource roads to conduct their businesses. This economic activity contributes hundreds of millions of dollars to the provincial economy. The health of the resource road network has a direct impact on future growth in these industries.

The management framework for resource roads tends to regard resource roads narrowly as unavoidable inputs and costs necessary to realise forest, energy and mineral resource values, with marginal benefit beyond that purpose. Such aspects of the management framework cause tensions and issues between the framework and the evolved community and public interest in resource roads described above.

On those roads used intensively by communities and the general public, degradation of road quality occurs when resource industry operations are curtailed on the road. These changes are difficult to predict and, under current conditions, provincial agencies are challenged in their response to the need for satisfactory public access over such roads.

To comply with current legislation and to minimize exposure to legal liabilities, resource industries deactivate some resource roads when they are not needed for industrial operations.

Current legislation provides a rigid definition of road deactivation which, when applied by resource industries to a given road, precludes public vehicular access. If such roads provide significant social and economic benefits to communities and public users, the flow of those benefits is effectively ended by the act of road deactivation.

Access Management Planning is a tool to resolve acute road management conflicts. That tool, with well designed public involvement, creates the social, economic and environmental context within which decisions may be made in the face of acute conflict. While this tool is not needed everywhere, there is some public perception that this tool is underutilised at present.

At present, public road users and industry road managers struggle to find the ways and means to maintain a healthy flow of road management information between them, which causes conflict when decisions are implemented on the ground. Similarly, there is present difficulty in establishing and maintaining equitable business-to-business relationships and two-way dialogue between the wide range of commercial and industrial businesses, large and small, that are affected by resource roads management decisions.

There are a number of practical measures which, when implemented, would significantly address these tensions and issues and, in so doing, greatly improve the way that resource roads work for communities, the public and commercial interests. These measures include:

1. The adoption by all provincial agencies involved with the resource road management framework policy tenets that recognize the evolved role that resource roads now play in our economy and society, including:
    a. Some resource roads are permanent platforms for broad rural economic growth, diversification and government revenue generation;

    b. Some resource roads are long-term rural infrastructure assets, gateways to a broad suite of rural amenities, integral parts of a rich rural lifestyle, essential for rural community resilience and well-being;

    c. For the reasons above, there is a principled basis for part of the ‘public good’ derived from resource roads to be funded from a base broader than forest, energy or mineral resources;

    d. On some resource roads, both industrial and public uses are primary uses.

2. Within the larger resource road network, explore by policy the ways, means and criteria to distinguish a resource road class defined as High Public Use resource road. For such roads, explore a new funding model with the following attributes:

    a. Clear policy criteria to define the resource roads classified as a High Public Use road. The choice of criteria will determine the number of kilometres of resource road that falls

within the new classification;

b. Consider taking a ‘systems’ approach to budgeting for High Public Use Roads, involving several ministries and based on the premise that such roads are extensions of the public transportation infrastructure;

c. Maintain in a new funding model the capability for resource industries to pursue global competitiveness through continued, efficient functioning of High Public Use Roads for industrial operations;

d. Ensure in a new model that resource industries continue to pay the road costs of their operations, without subsidy;

e. To achieve all of the above it will likely be necessary for the province to define in policy the road characteristics and standards of maintenance to be achieved on High Public Use Roads;

f. Use a multi-year funding approach for High Public Use Roads, similar to the approach used for public road maintenance, to create year-to-year certainty for operations;

g. Seek balance in the model between capital funding and operating funding for roads management to enable minimization of combined capital and annual operating costs associated with High Public Use roads.

3. Without reducing environmental standards, minimize road deactivations to enable the realization of the social and economic benefits of resource roads to non-industrial users by:
   a. Expanding in legislation the ‘public assumed risk’ legal construct for limiting third party legal liability exposure of resource industries;

   b. Introduce to the legislated definition of road deactivation flexibility to enable managers to match deactivation measures and practices to site-specific environmental risks;

   c. Provide to provincial officials the discretion needed to apply the flexibility mentioned above along with legislated guidance to support the exercise of that discretion;

   d. Define in policy a result-oriented description of best deactivation practices to prevent unnecessarily aggressive deactivation measures from being implemented on the ground.

4. Wherever necessary to resolve serious conflict, the province should be prepared to apply the recently created Corporate Results-Based Model for Access Management. As such action is taken, the province should be especially sensitive to public apprehensions that the planning processes that flow from this are carefully balanced for all participants and that outcomes are fully grounded in sound science;

5. Appropriate provincial agencies should collaborate on the establishment of a 'one-window' forum or space to act as the platform for information exchange and dialogue on road management matters between public, commercial and resource industry parties with an interest in resource roads. Such a one-window space should be designed with the following considerations in mind:
    a. Full exploitation of current information management and social media options;

    b. Enable easy and low-cost flow of road management information between all parties interested in resource roads management;

    c. Facilitate or support stakeholder engagement and input when formal opportunities to make input to Forest Stewardship Plans arise;

    d. Support and enhance the operation of the professional reliance component of the effectiveness monitoring framework for the *Forest and Range Practices Act*;

    e. Provide a new communication forum that supports the building of business-to-business relationships between commercial operators, resource industries and all others.

6. In parts of the province there exist Industrial Road User Committees that primarily focus on building collaborations on resource road issues between industrial users. Consideration should be given to encouraging the establishment of such committees in all parts of the province, and to the broadening of their terms of reference to include some aspects of community use of resource roads.

Introduction

In September 2008 Premier Gordon Campbell announced that the Minister of Community and Rural Development would chair a joint committee of ministers and Union of BC Municipalities (UBCM) representatives tasked to make recommendations to improve the way that resource roads work for communities. The joint committee has completed its work, and its recommendations are described in this report.

'Resource roads' are roads the original purpose of which was to enable the development of timber, energy or mineral resources in BC. That purpose is reflected in the design of the legislated management framework for resource roads, in the locations and pattern of roads in the resource roads network and in the way resource roads are planned, constructed and maintained.

The vast majority of the resource road network emerged from the forest and energy industries, with the latter being heavily concentrated east of the Rocky Mountains in northeast BC. The forest sector, and its resource road network, established and grew first on the coast following the granting by the Crown of certain timber tenures in the late 1800's. The interior of BC saw a rapid expansion of the resource road network commencing in approximately the middle of the 20th century, when 'chip-and-saw' mill technology emerged. This technology had a profound impact on forestry in BC. It supported growth of an extremely efficient lumber producing industry. It enabled the production of high quality pulp chips as a by-product of lumber manufacture, which was a catalyst for growth in the number of pulp mills in BC. Importantly for the resource road network, it made economic the harvesting of timber of a quality and in locations that were not previously economic. This made possible higher timber harvest levels for which there was a corresponding increase in the pace of resource road development.

As our population and economy has grown over the decades, resource roads have become a valued part of the infrastructure of our province, in a number of instances acting as the primary ground access to communities. In other instances the economic and public good derived from resource roads has diversified significantly from a starting point of timber, energy or minerals. In very many cases, resource roads are seen by citizens as an essential means to exercise a rich rural lifestyle. Although community and public use, and interest, in some resource roads has changed dramatically over time, our approaches to managing resource roads has not fully adapted to those changes.

This committee report describes strategic level directions to improve the way that resource roads work for communities. Over the ensuing months, it will be necessary for government to do the detailed work and problem solving required to address some financial, policy and regulatory implications of the report recommendations for several ministries. Successful completion of that work and problem solving is necessary to realise the positive benefits of the report recommendations for communities 'on the ground' at the earliest practical time.

The Importance of Resource Roads to Society and the Economy

Understanding how the role of resource roads in our society and economy has evolved is essential to improving the way such road work for communities. There are a number of noteworthy, defining aspects of this evolution which will continue into the future, giving us insight into where beneficial change opportunities exist:

1. ***Industrial Investment in Resource Roads.*** Virtually all resource roads in BC have been initiated by the industrial sectors of forestry, energy and mining. At present, in excess of 90% of capital and operating funding associated with resource roads is private funding from the resource industries. These sectors have always been the 'first in' to previously inaccessible parts of rural BC because they are the only economic sectors that can recover the capital and operating cost of road infrastructure from the value of the resource that they are developing. The only significant exceptions to this have been when government chose to invest directly in resource road construction which, since the mid-1980's, has occurred primarily through the BC Timber Sales Program and its predecessor program.

   Resource industries will continue to make resource road expenditures in the future as needed to conduct their business. Resource industries make a large contribution to BC's economic base, making their global competitiveness a matter of public interest. In the interests of global competitiveness, resource road investments should be efficient for the sector and cross-subsidy to other economic sectors should be guarded against.

2. ***Foundations for Long-Term Infrastructure and Community Development.*** In our history, resource industry and resource road development has led directly to community development. In some cases, what were essentially industrial camps grew into permanent communities with resource roads as the only initial ground access. In other cases, long-existing First Nations communities became connected to the road network as it grew toward them from elsewhere, with consequential impacts on community life. As a result of long-term, changing public use patterns, some resource roads that began as purely industrial resource roads have transitioned into today's public highways and rural public side roads.

   While our province is unlikely to see many completely new communities emerge as occurred in the early part of the 20th century, a number of existing small communities, back-country recreation assets and emerging industries, such as the alternative energy industry, will continue to develop with a reliance on resource roads. Within the larger resource road network, there is a sub-set of roads, mostly under Ministry of Forests and Range jurisdiction, which in present times provide a public infrastructure function not unlike public roads under Ministry of Transportation and Infrastructure jurisdiction. It will be necessary for our approach to resource roads management to mature and evolve to

accommodate resource roads that undergo transitions to high community and public use.

3. ***Platforms for Rural Living.*** Although designed for industrial operations, resource roads have come to be prized for the lifestyle they enable for rural residents and urban citizens that visit rural areas. Sport fishing, recreational hunting, all-terrain vehicle recreational use, snowmobiling, hiking, equestrian sports, boating and many other pursuits are a large part of a rural lifestyle dependent on resource roads. The ability to pursue these activities enriches rural life, adds resilience to rural communities and makes large contributions to the economy.

   Rural values and lifestyle are rooted in the attributes of rural places. Rural people express their values through the pursuits described above, pursuits which are place-based. Resource roads are now seen as public assets that enable the enjoyment of special rural places. Rural people feel the same way about resource roads as the means to enjoy such places as, for instance, a Vancouverite may feel about the sea wall as a means to enjoy Stanley Park. The ability to reasonably access and enjoy these places in our youth, middle age and when our personal mobility is diminished by age is a significant reason for population to remain in rural communities – we stay for the lifestyle. Resource roads will play an increasingly important role in the ability of rural residents to practice their lifestyle with a resulting positive impact on rural community stability, and this role will grow with time.

4. ***Platforms for Rural Economic Development.*** Although established for forestry, energy or mining development, resource roads have also acted as a platform for economic diversification of rural BC. Economic sectors such as ranching, trapping, commercial backcountry recreation, tourism, commercial wildlife harvesting and others have become wealth and government revenue generators based on the presence of functioning resource roads.

   The economic impact of these rural commercial enterprises combined with the non-commercial rural pursuits mentioned previously is significant and relies on a functioning resource road network. Furthermore, there is considerable undeveloped ‘upside’ in terms of economic growth and diversification that will emerge based on the competitive and comparative advantages that exist in a given rural region. Some of this diversification and growth opportunity is readily identifiable as we see increased economic activity emerging from the growing tourism sector, biomass energy resources, small-scale hydro electricity, First Nations cultural tourism, extraordinary freshwater fisheries, business development around First Nations communities, future carbon management in forests, etc..

The role of resource roads as platforms for rural economic development warrants some elaboration, as recognition of this function is fundamental to policy change for improved stewardship of these economic assets. The following examples give a sense of some of the economic activity dependent on resource roads beyond the primary role they play in the forest, energy and mineral sectors:

a. According to Tourism BC, nature-based tourism generates at least 12% of total tourism-based industry revenue in BC. Through approximately 3000 nature-based businesses 1.2 million clients spent $1.2 billion in 2005. Many of these businesses rely on resource roads to transport their clients to the nature-based resource that underpins their business;

b. In November 2009, the Freshwater Fisheries Society of BC reported that, in 2005, approximately 270,000 freshwater anglers enjoyed 4 million angling days and spent approximately $480 million on equipment, travel and accommodation. Approximately 70% of these expenditures were in rural BC. It is estimated that the 1,000 businesses that outfit freshwater anglers contributed $210 million in GDP. Freshwater anglers contribute $125 million in provincial and federal taxes annually. Angler expenditures have grown 10% between 2005 and 2009, and the Freshwater Fisheries Society of BC is managing toward a growth target of 30% by 2017. The overwhelming majority of the freshwater fishery in BC is accessible by ground only over resource roads, without which this economic activity would not occur.

c. In December 2006, a consulting firm estimated that, in 2005, all terrain vehicle (ATV) use in BC generated a combined direct and indirect GDP of $168 million. Provincial government revenues directly and indirectly attributable to ATV activities were $29.3 million. Beyond the purchase of the ATV, individuals consume specialised clothing, ATV accessories, trailers, club memberships, food and accommodation, insurance, gasoline and towing vehicles. The average ATV recreationist spends 6.8 nights per year in rented accommodation. As of 2005, the sector had been experiencing an annual growth rate of 12%. A large proportion of ATV users travel resource roads to the destination where ATV recreation takes place. Resource roads are a critical part of the trail network for the ATV community, particularly roads no longer used for industrial purposes, which form a major part of the trail network.

d. Snowmobile tourism relies heavily on resource roads to access snowfields and trails of interest. For example, in 2009/10, eight such roads in the Valemount/McBride region were used by 20 to 25 thousand snowmobile

excursions to reach such destinations. On average each visitor stays slightly more than 3 days and spends nearly $200/person/day on accommodation, restaurant meals, other food, fuel and other expenses. The indicated expenditure resulting in the local area is between $12 million and $15 million annually, and is growing rapidly. Almost 90% of these excursions are from Alberta, bringing new money into the BC economy and growing the economic base.

e. The guide outfitting industry welcomes in excess of 5000 non-resident hunters visit BC each year. Visiting hunters must retain the services of a guide outfitter, and they spend more per capita per day than any other visitor to BC. Through 233 licensed guide outfitter businesses, the industry employs over 2000 people in rural communities. In 2003, BCStats reported that the activities of non-resident and resident hunting combined generated $48 million in GDP. Resource roads represent important access infrastructure for the hunting industry, providing access to lodges and to regions where harvestable surpluses of wildlife are found.

f. The beef cattle industry relies heavily on Crown range land managed in synergy with privately owned core lands. This reliance will increase as grass fed beef value chains are developed further through initiatives outlined in the recent Ranching Task Force Final Report. Access to Crown range is a critical factor in maintaining and growing the scale of the industry in BC. In 2008, revenue from cattle sales was $250 million. The majority of Crown range held under tenure by the ranching sector is accessed over resource roads.

g. As the alternative energy sector grows in BC the resource road network will contribute to its economic viability. Independent power producers will use resource roads wherever possible as access to their developments. The resource road network will also provide access points to, or act as the lowest cost route for, parts of the transmission network as it expands in response to the development of geographically dispersed alternative energy resources in rural BC.

On May 26, 2010, Statistics Canada released population growth projections indicating the BC population will grow between 29% and 57% over the next 25 years. As our population grows, resource roads will play a growing role in our economy. Sound stewardship of resource roads as economic assets will ensure they fulfil their potential to benefit the rural economy and provincial economy, and to support a rich rural lifestyle in our province.

The Nature of the Resource Road Network

The resource road network in BC is vast, estimated at approximately 400,000 kilometres in length. There is a range of physical characteristics, nature of public use and responsibilities for funding different strata of roads within the resource road network. Figure 1 depicts an approximate breakdown of the forest sector portion of the resource road network (estimated at 375,000 km) in terms of industrial and government control and funding responsibility.

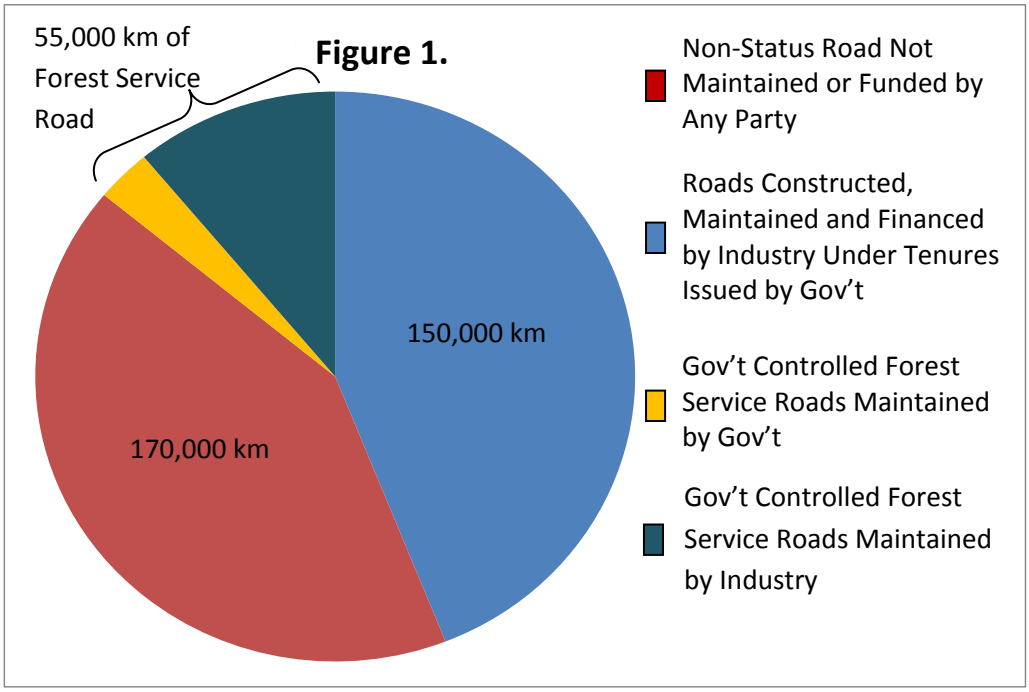
Figure 1.
55,000 km of Forest Service Road
150,000 km
170,000 km
Non-Status Road Not Maintained or Funded by Any Party
Roads Constructed, Maintained and Financed by Industry Under Tenures Issued by Gov't
Gov't Controlled Forest Service Roads Maintained by Gov't
Gov't Controlled Forest Service Roads Maintained by Industry

Government Controlled Resource Roads

With some exceptions found in the energy sector and mining sector, the vast majority of government controlled roads are Forest Service Roads falling within the jurisdiction of the Ministry of Forests and Range. Broadly speaking, the Forest Service Road network tends to be comprised of long-term, 'arterial' types of resource road. These roads are often, but not always of good and very good standard when considered in a back roads context. For example, when a Forest Service Road is not being used for industrial operations, the Crown may reduce the standard of maintenance on that road to the 'wilderness road' maintenance standard. Within the total 55,000 kilometre portfolio of Forest Service Roads, approximately 11,000 kilometres of Forest Service Road provide access to communities, including First Nations communities, dispersed or somewhat clustered rural residences along the roads, and to areas with recreational assets within them.

Resource Roads Constructed and Maintained by Industry:

The physical character of the large inventory of roads constructed, maintained and financed by industry (approximately 150,000 km) ranges on a continuum from high quality roads under active use for the transportation of natural resources to roads being maintained to a 'wilderness road' maintenance standard during periods of non-use by the resource industries. Construction and maintenance of this type of resource road relies entirely on private funding from resource industry companies and public funding through BC Timber Sales, which sells Crown timber on the open market on behalf of the Ministry of Forests and Range. In the case of the forest sector, in a year when that sector operates at an average scale it will invest approximately $400 million in road construction and $140 million in maintenance (some maintenance expenditures are on Forest Service Roads maintained by industry under Road Use Permits authorizing industrial use of Forest Service Roads). From the point of view of communities, these roads tend to be used for a wide range of rural lifestyle and rural economic purposes and are highly valued by public resource road users for those purposes. In general, there is a reasonable degree of public satisfaction with the way in which these roads are maintained, as that level of maintenance tends to support the type of uses put to the road by the general public.

Non-Status Resource Roads:

Non-status roads are roads for which neither government or industry has an obligation to maintain. They do not have status, for instance, as Forest Service Roads, nor does any industrial operator hold an authorization to use such roads. The physical character of the large inventory of 'non-status road' (approximately 170,000 km) tends strongly toward a very low standard of road as they are not actively maintained by either industry of government. Some of these roads are impassable to normal vehicles and some roads are well on their way to being reclaimed by nature. From the point of view of community use of non-status roads, it can be generally said that these roads are valued as access for recreational activities such as hunting, fishing or as trails for ATV's. Public expectations for improvement in these roads are generally very low.

Issues, Principles and Recommendations

The Management Framework For Resource Roads:

The management framework for resource roads in BC has developed over a period of many decades and, to a considerable degree, was developed in policy silos defined in terms of the industrial sectors of forestry, energy and mining. The majority of that framework is articulated in a broad suite of legislation and regulations in B.C., including in the:

- *Forest Act*
- *Forest and Range Practices Act (FRPA)*
- *Forest Planning and Practices Regulation* pursuant to the FRPA
- *Oil and Gas Commission Act*

- *Petroleum and Natural Gas Act (PNGA)*
- *Petroleum Development Road Regulation* pursuant to the PNGA
- *Geophysical Exploration Regulation* pursuant to the PNGA
- *Geothermal Resources Act*
- *Pipeline Act*
- *Mining Right of Way Act*
- *Land Act*
- *Industrial Roads Act*
- *Occupiers Liability Act*

If one considers the current management framework as a whole, it is possible to identify several policy tenets upon which the framework is based and which can generally be found in most or all parts of the framework. These tenets have existed in the model for a very long time, all through the period that community and public interests in resource roads have changed as described previously. Given our present understanding of community and public interests in resource roads, it is therefore possible to identify some shifts in the policy tenets behind the management model that would support improvements in the way resource roads work for communities.

From Current Policy Tenets	To Desired Policy Tenets
Resource roads are seen narrowly as inputs to the production of forest, energy and mineral resources, necessary for the time span (short, medium or long) appropriate to that purpose.	Some roads are permanent platforms for broad rural economic growth, diversification and government revenue generation.
Resource roads are an unavoidable short and long-term cost to resource industries and government.	Some resource roads are long-term rural infrastructure assets, gateways to a broad suite of rural amenities, integral parts of a rich rural lifestyle, essential for rural community resilience and well-being.
For the reasons above, the capital and operating costs of resource roads must be borne by the economic value of forest energy or mineral resources.	For the reasons above, there is a principled basis for part of the 'public good' derived from resource roads to be funded from a base broader than forest, energy or mineral resources.
Industrial use of resource roads is the primary use. Public use of resource roads is incidental, and largely subject to, industrial use.	On some resource roads, both industrial and public uses are primary uses.

Issue: The management framework for resource roads is heavily oriented to the role resource roads play in the development of forest, energy and mineral resources. Over time, the actual role of some resource roads has diversified from that orientation to one which includes diversified community, public and commercial use. The management framework has not fully adapted to this change, and that is the fundamental cause of tension between the way resource roads are managed and community expectations about how resource roads should be managed.

Recommendation:

It is recommended that all provincial agencies involved with the resource road management framework adopt the desired policy tenets described above and test any future policy change for consistency with them.

Resource Roads as Access to Communities and High Public Use Areas:

Within the total 55,000 kilometre portfolio of Forest Service Roads, approximately 11,000 kilometres of Forest Service Road provide access to communities, including First Nations communities, dispersed or somewhat clustered rural residences along the roads, and to areas with recreational assets within them. Within that 11,000 km population of Forest Service Road there is a range of public use, and some roads are extraordinarily heavily used by the public by virtue of identifiable communities, large numbers of dispersed rural residents or high-use back country recreation areas being located along their length. Such resource roads normally continue to carry industrial traffic however, over time public use has increased as the tourism industry has grown, the population has grown, or back country recreation has increased based on the recreational assets present on the resource road.

Some of the roads mentioned above play a role in our economy and society similar to our public highways and rural side roads. They are the supply line to communities and residences, the route to the nearest hospital, sometimes the school bus route for children and they are travelled by workers to their place of employment. They are the access to some of the most important back-country recreation assets in the province, assets that support highly valued rural pursuits. They are also infrastructure platforms for rural economic activity and growth, supporting the full range of back country businesses that exist along their length. In many cases, they link remote First Nations communities to the rest of BC, opening up new opportunities for those communities.

To illustrate the above, examples of communities with resource-road-dependant access include Bamfield, Zeballos, Holberg, Yekoochie, and Fort Ware. Examples of recreational assets that attract high levels of public traffic include Carmanah Park, Juan de Fuca Marine Trail and roads that provide access to parts of Adams Lake.

We can see from the history of BC that a number of what were originally resource roads have made a transition over time into the public highway and rural side road infrastructure portfolio. This trend will continue, and it is prudent to expect and plan for this continued trend. This trend will be most obvious within the portfolio of High Public Use Roads that exists.

The regulatory framework requires the industrial operators of resource roads to maintain the roads. For example, in the case of forest sector roads, the authorised person must ensure the road is safe for industrial users. The standard of maintenance for petroleum development roads is that which the operator "considers necessary for safe use". This maintenance is performed during active industrial operations. Public users are often accepting of the industrial standard of maintenance achieved during active industrial operations however, there are exceptions. Where significant numbers of users find it necessary to travel such roads with highway cars, they may find that the level of maintenance, especially surface grading, that is acceptable for industrial use is problematic for their vehicle type. Similarly, industrial vehicles may cope well with a depth of snow on the road surface that is problematic for personal vehicles or less experienced drivers. Standards of dust control can be an issue for public users.

The level of resource industry operations fluctuates through time with economic conditions. These operations also move geographically as industry pursues resource management objectives, such as salvaging pine beetle killed timber or developing certain natural gas basins over others. When this occurs, industrial use of certain resource roads is reduced in favour of others. These types of changes can occur with little notice and may last for years as we have seen with the current economic slowdown in the forest sector, which is presently operating at a level substantially below average.

If a resource road is subject to the *Forest and Range Practices Act* (which includes forestry and some energy and mining sector roads), but is not being used by its operator for active industrial operations, whether for short periods or even periods of years, the operator has a right under the *Forest Planning and Practices Regulation* to reduce the level of maintenance. In these cases the industrial operator must ensure that the road drainage system and the integrity of the road structure are maintained to the extent necessary to avoid material adverse effects on forest resources, for example, water (the 'wilderness road' maintenance standard). Under this maintenance regime, adverse consequences are quickly felt by public users of the road. Public users of roads will initially notice that the running surface of the road is not graded for smoothness. In winter, snow removal will not be done by the industry operator. If maintained under this 'wilderness road' standard long enough, some roads may be difficult to access with certain types of vehicles (eg. cars, motorhomes). When this occurs on roads that are used for community access or access to heavily used public recreation assets, public dissatisfaction rises, and it falls to the provincial government agencies to attempt to address the issue with available funding provided through voted appropriations.

To meet operational imperatives, a decision to curtail maintenance can be made by industry with little advance notice. The number, location and extent of such decisions across the province in a given year is difficult to predict and plan for. The budgeting process of government is done well in advance of the start of a fiscal year, and is difficult and slow to change mid-year. If the pattern of private industrial road maintenance decisions that unfold in a given year deviates significantly from the budget decisions of resource agencies and Treasury Board made many months earlier, resource agencies often find they lack the voted appropriations to fund needed maintenance. As a result, public resources available to address community use issues on resource roads often do not match the need.

The foregoing discussion relates to circumstances where a road experiences high volume demand for public use. There are a significant number of resource roads in BC that have along their length very low numbers of dispersed rural residences that have been established over the decades. These roads are not part of the public road network to which public road maintenance funding and policy applies. When a road in these circumstances is not maintained as a result of industrial operations, it is the responsibility of the rural resident to assume the costs of maintenance if public funding is not available for that purpose.

Apart from those circumstances where a resource road represents the main, heavily used access to a community or high use recreation area, there are also some instances where an existing resource road is uniquely positioned to serve a community as an alternate emergency route or egress in the event that a public highway or the primary resource road access to a community is temporarily closed due to, for example, landslide, flood or wildfire. The certainty with which one can identify such roads varies. For instance, flood risks and their impact on a given road can be fairly easily defined geographically for differing flood stages of the watercourse in question. The risk of wildfire impact on the utility of roads is more difficult to plan for as wildfires can start nearly anywhere in the forest, and can spread in any direction depending on conditions. The province has an established framework that can be used to approach the management of those resource roads that have potential high value as emergency access routes:

- The *Emergency Program Act* and the *Local Authority Emergency Management Regulation* pursuant to that Act require local authorities, including municipalities and regional districts, to prepare emergency plans respecting preparation for, response to and recovery from emergencies. The identification of resource roads that have high value as alternative emergency access routes is an appropriate inclusion in such plans. Nearly all such resource roads will be located within the boundaries of regional districts as opposed to municipalities;
- Such plans are required to be updated on a regular basis, providing ongoing opportunities to address emergency access issues. Local authorities will routinely work with First Nations partners whose communities have an interest in emergency management planning;

- The identification of roads of interest in emergency plans provides a ready basis to make them known to resource industry companies that may have control of a road via a permit issued by the province, and to provincial agencies involved in emergency management, enabling communication between such parties and local authorities;
- The identification of such roads as potential emergency management assets provides a basis for discussion and problem solving between the various partners in emergency management planning and response, for instance, in the event that a resource road in question is slated for deactivation or subject to wilderness road maintenance standards that do not guarantee its utility as an emergency access route.

Over time as local authority emergency plans are continuously improved, this framework should strengthen the contribution that some resource roads can make to emergency response effectiveness.

Issues: The management and funding model for high-community-use roads does not at all times ensure a predictable or uniform standard of road maintenance can be achieved when resource industries curtail operations and road maintenance on such roads.

Principles That Underpin Recommendations:

1. Resource roads that experience high community or public use play a similar role in our economy and society as other public road infrastructure;
2. Exploration of new management approaches for such roads leading to maintenance outcomes parallel to those for other, similar public infrastructure has potential to improve the way such resource roads work for communities;
3. There are responsibilities that remain with citizens who, by personal choice, prefer to and elect to reside in dispersed locations clearly separate from established communities accessed by resource roads

Recommendations:

1. Within the larger resource road network, provincial agencies should explore by policy the ways, means and criteria to distinguish 2 classes of resource road. One class could be defined as high community or public use resource road. The criteria that determine the inclusion of a given road into this class of resource road should be clearly defined in policy to enable smooth transitions of roads into or out of this class as use patterns change over time. The other class of resource road should be all resource roads that do

not meet the criteria for inclusion in the high community or public use road class.

2. For the high community or public use class of resource road, explore a new funding model with the following attributes:

    a. ***Establish clear criteria to define high public use roads.*** One foundation of the model should be clear policy criteria that will be used to determine if a given resource road becomes classified as a high public use road. The choice of criteria will determine the number of kilometres of resource road that falls within the new classification;

    b. ***Consider a 'systems' approach to budgeting for High Public Use Roads involving several ministries.*** By regarding high public use roads as extensions of the public transportation infrastructure it may be possible to take a 'systems' approach to overall provincial funding of road road maintenance. In such a paradigm it may be possible to plan and execute public investment in high public use roads to achieve maintenance outcomes analogous to those for rural side roads, while recognising that many resource roads are of a lower standard than rural side roads which in turn affects the standard of maintenance possible;

    c. ***Maintain in a new funding model the capability for resource industries to pursue global competitiveness.*** The model must facilitate the continued, efficient functioning of High Public Use Roads for industrial operations. For example, it is critical that the model ensure efficient industrial vehicle configurations and axle loadings are able to operate on the road;

    d. ***Ensure in a new model that resource industries continue to pay the road costs of their operations, without subsidy.*** The model must enable the continued payment by resource industries of the road costs associated with their operations without subsidy;

    e. ***Define in policy the characteristics and standards of maintenance to be achieved on High Public Use Roads.*** To achieve all of the above, it will likely be necessary for the province to establish in policy a new road class for high public use roads, the characteristics that define that class of road and the standards of maintenance, including signage, to be achieved on that class of road;

    f. ***Use a multi-year funding approach for High Public Use Roads.*** The model should provide for multi-year funding, similar to the approach used for public road maintenance, to create year-to-year certainty for operations;

g. ***Seek balance between capital funding and operating funding.*** Effective management of roads requires funding of 2 types, capital funding and operating funding. Capital funding is used to renew road assets as they depreciate, for instance, by replacing bridges at the end of their life or repairing sub-surface damage to roads caused by use or extreme weather events. Operating funds are used to perform works required each year on a road, works such as surface grading, snow removal, dust control, small culvert replacement or brushing of rights-of-way. In roads management, there is positive interaction between capital works and annual operating costs in that certain capital investments can reduce annual operating costs resulting in net savings overall.

Road Deactivation and Public Access:

In contrast to the many positive social and economic benefits derived from resource roads, such roads also have an impact on the natural environment. One such impact is that roads can act as a potential source of soil sedimentation into the aquatic environment beyond those that occur naturally in watersheds, or at times of the year different than those that occur naturally. While a party is authorised to manage a road, this impact is mitigated through road maintenance. If the operator of a resource road wishes to stop maintaining the road entirely, current forest legislation requires the holder of a road authorisation to deactivate the road (any deactivation obligation falls to government in the case of Forest Service Roads).

The practice of road deactivation is intended to put the road into a stable condition such that the risk of sedimentation from the road is mitigated, thereby protecting water quality. Conservation of water quality is a matter of public interest for the maintenance of aquatic habitat and, in some cases, domestic water supplies. Beyond government's legislated protections for such values to which resource industries comply, private industrial operations typically carry an environmental certification issued by independent, non-government certifiers to assure buyers of their products that certain environmental management practices have been followed during production. These environmental certification systems require the industrial operator to follow strict standard operating procedures, some of which are procedures relating to protection of the environment. Industrial operators are strongly motivated to maintain their right to apply these certifications to their product as an important measure to ensure continued access to markets.

In offering the recommendations that follow in this report, the UBCM and provincial government sponsors of this report have 2 objectives:

a) To ensure that, where high environmental risks are present and are best mitigated through road deactivations, the practice remains in the land manager's toolkit; and
b) Without reducing environmental standards, to minimize road deactivations to enable the realization of the social and economic benefits of resource roads to non-industrial users.

The currently legislated definition of road deactivation requires that bridges and culverts be removed from the road and that the road be barricaded to normal vehicles. The operator of the resource road makes the decision as to which roads will be maintained or deactivated, and when this will occur. Under the *Forest and Range Practices Act*, the operator of a forest road may request an exemption only from the requirement to barricade a road being deactivated, but such a request can only be approved if there are no bridges or major culverts in the road. The province has authority to intervene and direct that a road not be deactivated, but there are not always proactive processes in place to plan or communicate with the public about where such interventions are in the overall public interest.

Although current forest legislation strives to be results-oriented, the legislated deactivation requirement is a rigid, default-type of requirement that does not enable land managers to consider the wide range of environmental risk that roads present, depending upon the location of the road in the province and site-specific risk factors. British Columbia is extremely diverse in biophysical terms. Climates range from temperate rain forest on the coast to semi-arid desert in parts of the interior to cold boreal forest in the extreme northeast. Terrain ranges from flat plateaux to steep mountainsides. A full range of soils is present from compacted glacial tills to highly erodible silts. In spite of this biophysical diversity, road deactivation requirements are the same under the law for the entire province.

Public access over resource roads that represent a low environmental risk could be maintained without increasing environmental impact if the province adopted a more flexible and sophisticated approach to road deactivation. This could only be achieved if land managers were provided additional discretion to apply a range of deactivation practices that match appropriately the site-specific environmental risk presented by a given road. The exercise of such discretion could be guided by the application of sound risk analysis tools, some of which have been in existence for many years.

Where a road has value to community users, road deactivation pursuant to forest legislation can be a source of considerable public dissatisfaction. Examples of concerns that have been expressed include:

- Some resource roads have been in public, not industrial use, since before road deactivation legislation existed (pre-1995). There have been occasions when present day industrial operations have temporarily resumed on such an old road and the road was subsequently deactivated, precluding public access that had existed for many years;
- Trappers cite examples where forest operations have taken place over trapping trails. Ranchers point to similar instances of present day roads being placed over trails used for ranching. When the resource roads are subsequently deactivated, the original trapping or ranching trail may no longer be useable, nor is the trapper or rancher able to use the resource road for access;

- Concerns are common that the actual practices used in road deactivation are unnecessarily aggressive beyond that required to control erosion, resulting in deep trenches across roads that preclude even ATV crossings.

A number of road deactivations are carried out for the sole purpose of reducing legal liabilities of industry or government. While a road operator holds an authorisation to manage a resource road, he carries some exposure to two types of legal liability risk:

a) Third party legal actions arising from incidents on a resource road;
b) Environmental legal liabilities arising from road-related environmental impacts.

With regard to third party liability risk, at present there is a complex matrix of differing legal duties of care and liabilities for government and industrial managers of resource roads. The specific third party legal risk exposure existing for a given road depends upon the legislation applicable to the road, whether it is the *Occupiers Liability Act, Industrial Road Act, Petroleum and Natural Gas Act or Mining Right of Way Act.*

There is a large population of resource roads to which none of the above applies and, as a result, the common law elements of negligence come into play if a legal action arises from an incident on a resource road. For the manager of a resource road, the legal outcomes from a negligence suit cannot be precisely predicted due to the uncertainties inherent in a proceeding where judges or juries will exercise a range of discretion in the application of the common law elements of negligence and expert witnesses may introduce unpredictable testimony. This uncertainty causes managers of resource roads to pursue risk management actions such as seeking to end their authorisation to manage a road as soon as possible, which in turn triggers the legislated requirement to deactivate the road to prevent vehicular traffic on the road.

In the current *Occupiers Liability Act* for BC there is a provision whereby a person is deemed to have willingly assumed the risks inherent in using a forestry resource road if they are using the road for a recreational purpose and the occupier has not received payment for that use (a 'public assumed risk' legal construct). Due to other specifics of the *Occupiers Liability Act* and the nature of rights granted to the operators of resource roads, this limitation upon exposure to third party liability does not apply to most resource roads. There have been only rare instances of third party litigation that have arisen from incidents on resource roads. Consultations with a number of organisations representing public users of resource roads indicate a high degree of support for the application of the 'assumed risk' legal construct broadly to resource roads. An expanded application of the 'assumed risk' legal construct would result in more roads being retained under tenure by industrial operators during periods when they are not required for industrial operations, thereby avoiding the triggering of the legislated road deactivation requirement.

Environmental legal liability reduction is the most frequent motivation for road deactivation. The federal *Fisheries Act* exists to protect fish and fish habitat, and provides for the laying of charges if a contravention can be shown. Provincial enactments include provisions that enable administrative penalties of up to $20,000 against the managers of resource roads contravening such enactments. The only option open to the industrial operator of a resource road to end exposure to environmental liabilities is to seek to end their authorisation to maintain a road, which in turn triggers the legislated requirement to deactivate the road. From the point of view of public access on resource roads, the opportunity to mitigate the negative social and economic impacts of road deactivation exists in measures that encourage road operators to maintain roads under management and to bring a more sophisticated approach to the practices surrounding road deactivation when it occurs.

Issues:

1. The legal definition of road deactivation is a rigid one which prevents variation in on-the-ground deactivation practices to correspond to variation in site-specific environmental risk;
2. Under current practice, some deactivation measures are more aggressive than required to protect the environment;
3. Measures to avoid exposure to third party legal liability is resulting in a number of road deactivations with a corresponding reduction in social and economic benefits from resource roads.

Principles That Underpin Recommendations:

1. Road deactivation measures that restrict public access to a resource road must be consistent with the social and economic benefits provided by the road while addressing the real risk of environmental liabilities;
2. Road deactivations motivated by avoidance of third party legal liabilities disproportionately reduce the social and economic benefits from resource roads and are to be avoided or delayed until absolutely necessary.

Recommendations:

1. Make appropriate legislative change necessary to expand the ‘assumed risk’ legal construct for limiting legal liability, presently exemplified by the recreational user assumed risk provision of the *Occupiers Liability Act*, such that all general public users of resource roads assume the risks of using resource roads.

2. Introduce to the definition of road deactivation flexibility to enable deactivation measures and practices to be matched to site-specific environmental risks;
3. Provide to provincial officials the discretion needed to apply the flexibility mentioned above along with legislated guidance to support the exercise of that discretion;
4. Define in policy a result-oriented description of best deactivation practices to prevent unnecessarily aggressive deactivation measures from being implemented on the ground.

Public and Stakeholder Communication and Influence in Resource Roads Management:

There are generally 2 ways that the general public and resource road stakeholders are able to engage in communication, express their views and influence resource roads management. These include participating in land management planning processes of several types when they occur and through communication at any time with industry or government licensed professionals engaged in and accountable for resource roads management in the field.

There are 3 types of plans that may provide direction or guidance to resource roads management. Each of these plan types has a different purpose and different opportunities for public involvement. The plan types fall in a hierarchy from high level 'strategic' plans to more detailed, 'operational plans':

1. ***Strategic Land Use Plans:*** Land and Resource Management Plans (LRMP's) and Commission on Resources and Environment Plans (CORE plans) are now in place for nearly the entire province. These are high level, strategic plans created during the 1990's and into this century. The scale of these plans is such that they cover regions, such as the Cariboo-Chilcotin or Kootenay region, or sub-regions of the province, such as timber supply areas or forest districts. These plans were developed through extensive public involvement. Their ongoing implementation is typically monitored by a plan monitoring committee that includes interested members of the public. These plans have been approved by the provincial Cabinet as government's policy for the management of land and resources in a given region or sub-region.

   These plans do not normally provide specific prescriptions for resource roads management. Rather, they tend to set out broad land use categories, such as protected areas, sensitive areas or areas where resource extraction will be the emphasis. It is through these plans that society attempts to resolve as much as possible land and resource management conflicts and to express society's preferences for managing resources in different parts of a region or sub-region. Once approved by Cabinet, it is expected that other types of more detailed planning will produce outcomes that are appropriate in the context of the Cabinet approved LRMP or CORE plan. These plans are the result of long, sophisticated negotiations between multiple stakeholders. Consequently, these plans are revised only infrequently and with great care. As such, the general public has

infrequent opportunity to influence resource roads management through this planning.

2. ***Landscape or Watershed Level Plans:*** There is another level of planning that is conducted at the scale of landscapes or watersheds. Examples of this scale of planning include Coordinated Access Management Plans or Sustainable Resource Management Plans. The development of this type of plan is managed by government with the involvement of public and industrial stakeholders with an interest in the landscape in question. These plans are not required or prepared for all areas. Instead, these types of plans act as tools to resolve and manage acute conflicts that may arise only in some areas and for which LRMP's or CORE plans were not designed to resolve. The ability of the general public to influence resource roads management through this type of planning therefore depends on whether or not such a planning process is initiated.

   As mentioned above, the design of this type of plan seeks to be consistent with the LRMP or CORE plan while providing more detail or guidance to land managers. For example, a Coordinated Access Management Plan may produce a consensus between public and industrial road users about issues such as motorized recreational access, road deactivations, permanent vs temporary roads etc., in a way that achieve LRMP or CORE plan objectives. It would not be appropriate for such plans to, in effect, change the Cabinet level land use decision made in the LRMP or CORE plan.

3. ***Operational Plans:*** Operational plans are plans required by legislation and regulation to be prepared before the industrial development of certain resources may commence. For the purpose of this report, the operational plan of primary interest is the Forest Stewardship Plan prepared by forest companies and, in government, by BC Timber Sales for approval by the forest district manager. With regard to resource roads planning, it is these operational plans that describe the general location of roads to be constructed under the plan. Legislation and regulation provide for a formal opportunity for interested parties to review the Forest Stewardship Plan and to submit comments to be considered in the process of approval. Forest Stewardship Plans, when approved, typically have a term of 5 years, but the term may be extended by a further 5 years under certain circumstances. The formal opportunity for the general public to influence the resource road management outcomes from a Forest Stewardship Plan therefore occurs with that frequency. As with landscape level plans, Forest Stewardship Plans are intended to be consistent with, and not confound, the government's resource management policy intent expressed in LRMP's or CORE plans.

Beyond the planning opportunities described above, an interested member of the public may engage in resource roads management issues at any time with industry or government licensed professionals accountable for resource roads management on the ground. The content of Forest Stewardship Plans mentioned above must be certified by a licensed professional appropriately

qualified relative to the plan content being certified. Most commonly, Forest Stewardship Plan content is certified by a professional forester. That reliance on professional certification of plans ('professional reliance') is an important component of the management system being used by government to monitor the effectiveness of the results-based legislative framework for public forest management in BC. Professional foresters in BC bear a responsibility toward the public to advocate and practise good stewardship of forest land to sustain its ability to provide those values that have been assigned by society. In fulfilling this responsibility, professional foresters must make a reasonable effort to gather the full range of interests through consulting the public, understanding management objectives stated through planning processes, knowledge of pertinent legislation, and their own awareness and knowledge. For this reason, professional foresters working with Forest Stewardship Plans are always open to dialogue with stakeholders in resource roads.

While working within the framework described above, public and industrial stakeholders in resource roads management describe a number of tensions that arise between them. These include:

1. Licensed professionals preparing Forest Stewardship Plans sometimes perceive that public stakeholders are seeking resource road management outcomes that are not consistent with the fundamental land use decisions previously made by Cabinet in LRMP's or CORE plans. When this occurs, licensed professionals feel they are in an intractable position. To state this another way, the mentioned licensed professionals occasionally perceive that they are being asked to effectively re-visit some aspect of a Cabinet approved LRMP or CORE plan through the design of a Forest Stewardship Plan;

2. Coordinated Access Management Plans (or other appropriate landscape level plans) have not been prepared for much of the province. There is considerable public sentiment that more such planning is required to provide a balanced socio-economic context for Forest Stewardship Planning, which so directly shapes resource road outcomes on the ground;

3. There is an apprehension among stakeholders that, when a planning process such as Coordinated Access Management Planning does occur, it is sometimes vulnerable to domination by one party to the process or another, or that sound science is not always applied to the issues that typically arise;

4. There are concerns that the current framework for planning and managing resource roads does not enable an appropriate flow of information between industrial road operators and public users of resource roads. The concern is expressed in terms of inadequate volume, timing and quality of information that flows between the parties. The most common public concern relative to information flow relates to road deactivation decisions of industry or government. Tensions rise when road management decisions, such as road

deactivations, occur without the prior knowledge of public users of the road. Under current legislation, industrial resource road operators do not include in Forest Stewardship Plans information regarding planned road deactivations. Also, only the general location of roads planned for construction is depicted in Forest Stewardship Plans. It is not a question of whether or not the road management information that previously appeared in rules-based operational plans exists – it does exist and is managed by forest professionals within forest companies and the BC Timber Sales organisation. The concern is in creating the ways, means and relationships that enable efficient dialogue and problem solving for all parties, and practicing those things on the platform of professional reliance. It is important for road users to be aware that dialogue and issue management with resource professionals is possible at any point during the term of the a Forest Stewardship Plan;

5. A concern that the relationship between commercial, often land tenured, users conducting business on resource roads and the resource industry operators of resource roads is not a business-to-business relationship, as they would have it. In addition to the forest, energy and mining industries that operate resource roads, there are a host of commercial enterprises operating on Crown land and resource roads in BC. An incomplete list includes guide outfitters, commercial back country recreation enterprises, trappers many of whom are members of a First Nation, ranchers, tourism lodge owners, mineral explorers and independent power producers. Typically, these business operators hold some form of land tenure to support their business. These enterprises can be significantly affected by road management decisions, for example dramatic changes in industrial maintenance or road deactivation. Their ability to manage their businesses in light of such decisions depends considerably on healthy business-to-business relationships between them and the industrial operators of resource roads. We know it is possible to create these conditions as, for instance, the Guide Outfitter Association of BC indicates that its members and resource industries have generally been able to achieve them.

With regard to the concerns described above all parties, including public road users, commercial road users and resource industry road operators, appear to hold common views that are likely touchstones for solutions:

- All parties want good relationships and 2-way dialogue on road management issues;
- All parties want transparency in road management decisions to avoid surprise regarding outcomes;
- Tests for efficiency, cost avoidance and minimisation of regulation should be applied to solutions;
- All business owners operating on resource roads, large and small, want to communicate as equals on the land.

There are some distinctive attributes of how the oil and gas energy industry in northeast BC manages resource roads which are important to bear in mind. For the most part, the resource roads used by the energy sector are rather categorically either permanent or extremely temporary. For instance, when a well site is established, essentially permanent access to that site is required for industrial purposes therefore road deactivation rarely becomes an issue for public users. Many other roads are designed for temporary, one-winter use. In these cases, construction methods may rely significantly upon 'freezing in' snow to comprise much of the road, with only small amounts of earth excavation involved. Little remains of such roads after the spring melt, effectively deactivating the road. This reality in the energy sector means that recommendation #2 below will have very limited application in the energy sector.

Issues:

1. Access management planning tools are underutilised at present as a means of resolving conflict and there is a degree of distrust of such tools based in an apprehension of uneven influence between participants in them;
2. As the degree of public use and interest in resource roads increases the challenge of creating information flow and transparency around road management decision has grown;
3. The diverse group of commercial enterprises with rights to do business granted by the Crown are struggling to establish the business-to-business relationships they wish for with resource industries regarding resource road management matters.

Principles That Underpin Recommendations:

1. There are aspects of resolving the issues mentioned above that government alone, as the representative of the public landowner and issuer of rights to Crown land and resources, is uniquely positioned to address, notably planning and information management;
2. Establishing equity in business-to-business relationships places a mantle of responsibility on all business operators to contribute to the relationship appropriately.

Recommendations:

1. Wherever necessary to resolve acute conflicts, the province should be prepared to apply landscape or watershed level planning processes to reduce the conflict. These processes are rather labour-intensive for provincial agencies, therefore the degree to which this is possible will be limited by available staff resources. The recently created Corporate Results-Based Model for Access Management provides guidance to government agencies for this purpose. As such action is taken, the province should be especially sensitive to

public apprehensions that the planning processes that flow from this are carefully balanced for all participants and that outcomes are fully grounded in sound science;

2. Acting as the representative of the public landowner and the issuer of all rights to operate on Crown land, appropriate provincial agencies should collaborate on the establishment of a 'one-window' forum or space to act as the platform for information exchange and dialogue on road management matters between public, commercial and resource industry parties with an interest in resource roads. Such a one-window space should be designed with the following considerations in mind:
   a. It should fully exploit current information management and social media options;
   b. It should enable easy and low-cost flow of road management information between all parties interested in resource roads management;
   c. If possible it should facilitate stakeholder engagement and input when formal opportunities to make input to Forest Stewardship Plans arise, prior to their approval by government;
   d. It should support and enhance the operation of the professional reliance component of the effectiveness monitoring framework for the *Forest and Range Practices Act*;
   e. It should act as a communication forum that supports the building of business-to-business relationships between commercial operators, resource industries and all others with an interest in resource roads based on shared responsibilities to exchange information, consult and proactively solve issues.

3. In parts of the province there exist Industrial Road User Committees that primarily focus on building collaborations on resource road issues between industrial users. Consideration should be given to encouraging the establishment of such committees in all parts of the province, and to the broadening of their terms of reference to include some aspects of community use of resource roads.

Other Considerations:

The UBCM/Province committee sponsoring this report focused its work on resource roads located on Crown land, and the ways in which those roads could better serve communities and the public interested in them. In the course of its work and consultations, the committee became aware of some considerations that are 'one step removed' from resource roads or which relate to private land and road interactions. While these considerations are not strictly within the scope of the Committee's focus, it wished to summarize and comment on what it heard for the sake of completeness.

Roads on Private Land:

While the vast majority of forest land in BC is Crown land, there are some significant tracts of forest land held in private hands, mostly concentrated on the coast. When these tracts of private land are incorporated with Crown land in a Crown-issued forest tenure, such as a Tree Farm License, the public typically enjoys access on private roads in a manner similar to that for resource roads on the Crown land included in the forest tenure. The UBCM/Province committee heard concerns that, when these tracts of private forest land fall outside a Crown-issued forest tenure, the private landowner may not permit public access over a private road on that land. This can have impacts such as excluding public access to tidewater or to Crown land beyond the private land. The remedy for such situations is the acquisition of the private right-of-way into Crown ownership, which requires a willing seller and the availability of public resources to pay for the right of way and manage the road. Alternatively, current legislation provides expropriation authority to some provincial agencies where expropriation of rights-of-way is determined to be in the public interest. The provincial government manages such property acquisitions on an ongoing basis to the limits of its ability.

Resource Road Access to Private Land:

There are a number of instances where the only ground access to private land parcels in the back country is over resource roads. On a relatively small scale, there are also instances where Crown leases, such as recreational leases, may be converted to private land and be sold to the lease holder by the province. When the provincial government is involved directly in the sale of land into private hands, care is taken to ensure that prospective buyers understand that ground access via a resource road is not guaranteed or that improvements to a resource road may never occur. However, with the subsequent passage of time, some such private land parcels may be offered for sale on the open market. The UBCM/Province committee was informed that, in some instances, third parties have led prospective buyers to believe that guarantees of access or promises of future improvements existed. This has resulted in some new landowners requesting of local or provincial government that a resource road be kept open or improved with public resources, based on what they were led to believe during the process of buying the property.

Beyond the ‘buyer beware’ due diligence which everyone must accept responsibility for in carrying out real estate transactions, the UBCM/Province committee believes prospective land purchasers in such situations should not hesitate to avail themselves of the safeguards and remedies offered when a purchaser retains a realtor licensed under the *Real Estate Services Act.* Examples of the safeguards and remedies this brings include:

1. The duty of a realtor not to engage in "deceptive dealing". Deceptive dealing includes:

   (a) an intentional misrepresentation, by word or conduct, or in any other manner, of a material fact in relation to real estate services, or in relation to a trade in real estate to which the real estate services relate, or an intentional omission to disclose such a material fact;

   (b) a course of conduct or business that is intended to deceive a principal (a 'principal' is a party to a trade in real estate) about the nature of the real estate services, or about the nature of a trade in real estate to which the real estate services relate;

   (c) an artifice, agreement, device or scheme to obtain money, profit or property by illegal means;

   (d) a promise or representation about the future that is beyond reasonable expectation and not made in good faith.

2. The Real Estate Council established under the Act is empowered to license realtors and to suspend or cancel a license in certain circumstances including as a result of an order of a discipline committee.

3. A person may make a complaint to the Real Estate Council if the person believes that a licensed realtor may have committed professional misconduct or conduct unbecoming a licensed realtor. The real estate council must act on and make a disposition of a complaint.

4. On its own initiative or on receipt of a complaint, the Real Estate Council may conduct an investigation to determine whether a licensed realtor may have committed professional misconduct or conduct unbecoming a licensed realtor. The real estate council may convene a hearing by a discipline committee respecting the conduct of a licensed realtor.

5. The Superintendent of Real Estate appointed under the *Real Estate Development Marketing Act* may conduct an investigation to determine whether a licensed realtor has, in a way that is seriously detrimental to the public interest, contravened this Act, the regulations or the rules, breached a restriction or condition of hi/her licence, or done anything that constitutes wrongful taking or deceptive dealing.

6. If a discipline committee determines that a licensed realtor has committed professional misconduct or conduct unbecoming a realtor, the Act states that the committee must, by order, impose a sanction upon the licensed realtor, and the potential sanctions are described in the Act.

7. If the licensed realtor fails to comply with a sanction, a discipline committee may, by order, suspend or cancel the realtor's license.

8. The *Real Estate Services Act* provides for claims for compensation under certain circumstances.

The UBCM/Province committee believes prospective purchasers of land accessed only by resource roads will be adequately protected if they avail themselves of the safeguards and remedies open to them under the *Real Estate Services Act.*

Management of Human Activity Off of Resource Roads:

As mentioned previously in this report, resource roads provide public access to vast parts of BC, and they act as the jumping off point for an array of back country pursuits. The overwhelming majority of the public engages in these pursuits responsibly. Unfortunately, the UBCM/Province committee was reminded that a minority of circumstances create unfortunate impacts through:

- Operation of off road vehicles (ORV's) in sensitive ecosystems
- Concentrated ORV traffic reducing the productivity of rangelands
- Noise pollution
- Using the remoteness of resource roads to conceal refuse dumping

In considering these issues, it is useful to discern between the previously described function of land use planning, which strives to resolve conflicts within plan areas, and compliance and enforcement activities which strive to uphold legislation and regulation, some of which relates to implementation of some aspects of land use plans.

The Province has either recently implemented, or is currently moving forward, a number of initiatives to improve compliance and enforcement outcomes relating to the unfortunate impacts mentioned above:

1. The Province has brought into law prohibitions against ORV damage to sensitive ecosystems such as grasslands, wetlands streams, hillsides and alpine lands. Contraventions can lead to violation tickets of $575 or penalties up to $100,000. A number of high risk areas are subject to patrols during the spring, summer and fall;
2. Commenced in November 2009, the Province is advancing a comprehensive ORV Management Framework to be fully in place by November 2011, in collaboration with an ORV Joint Advisory Group, a group which includes UBCM. Among other things, the Framework will:
    i. Broaden the range of vehicles to which the *Motor Vehicle All Terrain Act* applies to include ATV's, dirt bikes and utility vehicles on wheels or tracks;
    ii. Require one-time registration of ORV's and the bearing of a more visible plate to assist peace officers to identify vehicles of interest. This will also increase the ability of the public to report observations of potential irresponsible ORV operation;
    iii. Require ORV's visiting BC with no registration or plate to take a temporary permit;
    iv. Improve muffler standards for ORV's to reduce noise disturbance to wildlife and recreationists;
    v. Include a Provincial ORV Compliance and Enforcement Strategy, along with an education component.
3. The Province is in the advanced stages of implementing an initiative called the Resource Management Coordination Project (RMCP). One of its initial focus points has been the

Compliance and Enforcement functions of those provincial agencies that have land and resource related compliance and enforcement jurisdictions (Ministries of Forests and Range, Environment, Energy, Mines and Petroleum Resources, Agriculture and Lands and Integrated Land Management Bureau). Through the RMCP, the mentioned agencies are achieving innovation in the compliance and enforcement disciplines by:

i. Applying cross-agency compliance risk analysis and rating;

ii. Managing according to multi-agency shared business planning;

iii. Improved ways of communicating between agencies;

iv. Using 'cross-delegation' of compliance and enforcement authorities to broaden the utility of available resources;

v. Using joint task teams involving Conservation Officers, RCMP, Forests and Range, Agriculture and Lands and Transportation and Infrastructure staff, and applying those task teams to high-incident locations;

vi. Cross-agency field delivery, sharing and deployment of human and financial resources.

As a result of this initiative, the agencies are seeing increased field presence with available resources directed to the issues of highest risk to the Crown land base and improved enforcement success and deterrence.

The UBCM/Province committee believes these initiatives as they unfold further will continue to enhance the province's ability to address the kinds of issues of concern off of resource roads.

Public Use of Road Radios on Resource Roads:

The UBCM/Province committee heard an expressed interest for easier public access to road radio frequencies used by industrial operators on resource roads. This interest was expressed from the point of view that public users of would be made safer by virtue of having in their vehicle a radio equipped with the industrial frequency used on that road.

The role of road radios, and the protocols for their use, in resource road safety has been the focus of extensive investigation since 2005 by federal and provincial government agencies and industry. A BC Radio Communications Working Group was formed to develop recommendations and policy related to radio use on resource roads. The working group includes Industry Canada, which licenses radio channel use, the BC Forest Safety Council, the Council of Forest Industries, BC Timber Sales, the Ministry of Forests and Range and the research institution FPInnovations. Two radio communication pilot projects were undertaken, one on the coast and one in the interior. This work led to the issuance of a stakeholder discussion paper by the BC Forest Safety Council in January 2010, and the work is ongoing.

In the course of their investigations, within a larger body of issues the working group pointed to several factors that have contributed to safety incidents which are germane to public access to road radio frequencies:

i. A trend toward more frequent simultaneous, overlapping radio communications resulting from high volumes of radio traffic causing critical communications to not be heard;

ii. Instances of some radio users either not being aware of, or failing to uniformly follow, radio protocols for a given road leading to confused communications;

iii. Interference across geographic areas between several licensed radio users and other operations;

iv. Excessive 'chatter' on radio channels contributing to distraction for listeners causing important communications to be missed.

Issues such as these have prompted the working group to move toward recommendations that have the effect of reducing the volume of radio traffic and bringing more rigour to radio communication protocols. For example, separating the radio frequencies assigned to log hauling operations from the frequency assigned to log loading operations reduces overall radio traffic. Carefully managing the transmitting power of radios within a geographic area can reduce interference between geographic areas. In all of its work, the working group has reflected the reality that nearly all resource roads are not radio-controlled roads (there is not a requirement to have a radio to use the roads). Instead, these roads are radio-assisted roads where the primary function of licensed radios is to facilitate the movement of industrial traffic. In light of these kinds of issues, it is possible that measures that generally broaden public access to road radio frequencies could actually make resource roads less safe overall.

Given the extensive work already done and ongoing, and the expertise engaged in improving the role of road radios in resource road safety, it is the view of the UBCM/Province committee that the outcome of work underway through the BC Radio Communications Working Group is the most appropriate avenue to balance public interests and safety concerns in road radio use on resource roads.

Conclusion:

A well managed resource road network is critical to the global competitiveness of our resource industries that capitalise the majority of the network and which contribute so much to the economic base of BC. A portion of the resource road network offers a legacy of benefit to BC communities beyond the ongoing requirements of the forest, mining and energy industries. As our province has grown over the decades, the rural economy has diversified in ways dependent on parts of the resource road network. New rural enterprises have taken root in the land base to which the resource road network provides access, generating hundreds of millions of dollars per year to the economy. Such resource roads have evolved into long-term platforms for rural economic diversification and growth, driven by the place-based resources found along their length. They are public assets that generate public good. With population growth projections for BC of a minimum of 29% over the next 25 years, the expectations that rural communities and economies place on resource roads will increase.

Large parts of rural BC have a relatively low density of public highways and rural side roads. Where that is the case, it is resource roads that provide public access to the special places where rural residents, and urban people that visit rural BC, pursue the activities that largely define rural living. Engaging in these pursuits is an expression of the rural values held by many of our

citizens. The continued ability to model these values depends considerably on how we manage our resource road network, and is one factor that affects the resilience of rural communities. The recommendations outlined in this report will enhance the contribution that resource roads make to economic prosperity and quality of life in BC, while conserving our environment.

In closing, the UBCM/Province committee extends thanks to those organisations and individuals that gave their time to either speak directly with the staff supporting the work of the committee, make a written submission to the committee, or both:

- Council of Tourism Associations
- Access BC Society
- BC Wildlife Federation
- BC Forest Safety Council
- BC Cattlemen's Association and Peace River Regional Cattlemen's Association
- BC Trappers Association
- BC Outdoor Recreation Council (and representatives of many of its member organisations)
- BC Guide Outfitters Association
- New Relationship Senior Officials Group
- Mr. Fred Marshall
- Ms. Joan Best
- Mr. Terry Wardrop
- Coast Forest Products Association
- Council of Forest Industries
- Mining Association of BC
- Association for Mineral Exploration BC
- Canadian Association of Petroleum Producers

END